Preliminary Drainage Report

For

La Osa

Pinal County, Arizona

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Project No. 24-0542

Date: January 2026

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1.0 GENERAL LOCATION AND DESCRIPTION

The purpose of this report is to provide a high-level overview of the expected project hydrologic and hydraulic drainage needs, and to set project expectations as part of the proposed rezoning with the Planned Area Development (PAD). The purpose of this report is also to describe the proposed on-site and off-site drainage systems to be designed in accordance with the requirements established by Pinal County, Arizona.

1.1 Contacts and responsible parties

Property Owners:

Verma La Osa Ranch I-10/Sasco 3700 LLC
2375 E. Camelback Rd, Ste 600
Phoenix, AZ 85016
Contact: Vermaland LLC

Verma La Osa Ranch I-10/Sasco Rd
Casa Grande 3677 Acres LLC
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Phoenix, AZ 85017
Contact: Vermaland LLC

Developer

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Phoenix, AZ 85251
Contact: Rob Clang

Engineering & Planning

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1130 N Alma School Road, Ste 120
Mesa, AZ 85201
Tel: 480.503.2250
Contact: Daniel "Ox" Auxier, PE

1.2 Location

The site is identified as a Pinal County Assessor Parcel Numbers (APNs): 409-11-0040; -0050; -006C; -002E; -002F; -002G; -002H; -003D; -013C; -015C; -0160; -018A; -0190; 409-14-002D; -002F; -004A; 409-24-001C; 409-25-001E; -001D; -001C; -002F; -002G; -003G; and -003E.2.

The site is further identified as a portion of Sections 3, 4, 10, 11, 12, and 13 in Township 10 South, Range 8 East and a portion of Sections 7, 17, 18, 21, and 29 in Township 10 South, Range 9 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona. See the Vicinity Map in Figure 1 for further information on the location of project.

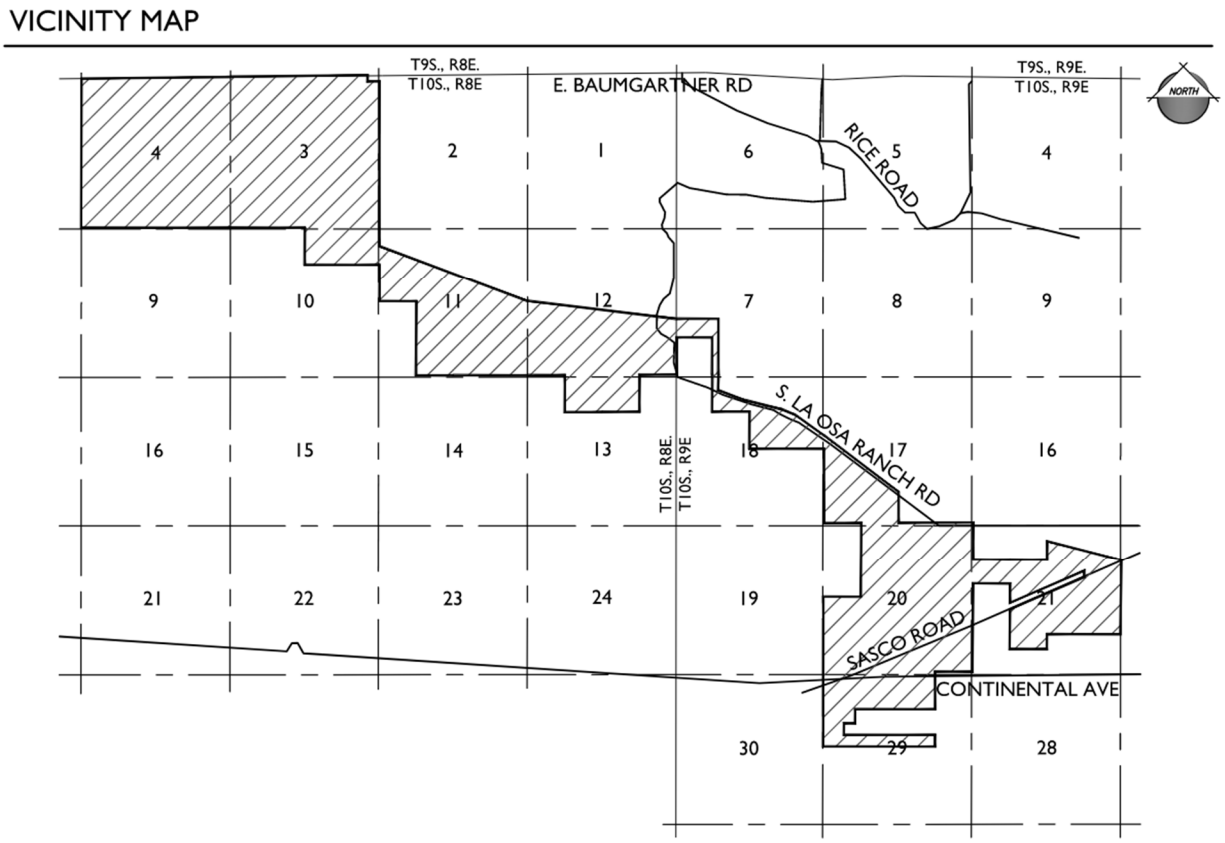


Figure 1: Vicinity Map

1.3 Description of Property

The purpose of the project is to construct data centers and/or similar industrial complexes/warehouses and power generation facilities with all the associated infrastructure necessary to provide power, communication, water, sanitation and access. The site is currently undeveloped with a Comprehensive Plan Land Use Designation of Moderate Low Density Residential and Major Open Space. The project would amend the existing comprehensive plan designation to Employment, General Public Facilities/Services, and Major Open Space (no changes are proposed for existing Major Open Space). The site is currently zoned as General Rural (GR) and is surrounded by undeveloped and/or agricultural land; however, a request for rezoning to Industrial 3 (I-3) with a Planned Area Development (PAD) overlay is being requested for the project area.

The site lies roughly along La Osa Ranch Road, Green Canal, and Santa Cruz Wash between the Baumgartner Road and Continental Avenue road alignments within Pinal County, Arizona and encompasses a gross area of 3374.51 acres of which a net 2,599.78 are developable. The parcels are also within the Extended Planning Boundary for the City of Eloy. In addition, a portion of the Property is within a Zone A floodplain area, also known as the Greene Wash watershed, a tributary to the Santa Cruz River. For further information refer to the Drainage Exhibit in Appendix A.

2.0 DRAINAGE BASINS AND SUB-BASINS

2.1 Major Basin Description

The La Osa project property is located within Flood Zone A and X per FEMA Flood Insurance Rate Map numbers 04021C3250E and 04021C2375E. The Flood Insurance Rate Maps (FIRM) has been included in Appendix B. The Area Drainage Master Plan for Pinal County indicates the property is subject to offsite flows. The offsite flow is estimated to be approximately 10,000 cfs of the Casa Grande-Eloy Watershed of the Greene Wash. No irrigation facilities will be influenced by local drainage changes.

The existing watershed is mostly desert shrubland, alluvial fan, and floodplain with some mountainous terrain to the immediate south of the project and agricultural land to the north. Green Wash flows alongside and through the property from the southeast to the northwest.

The undeveloped, vacant land is currently zoned General Rural (GR) and is within the Moderate Low Density Residential and Major Open Space Use land use area of the Pinal County Comprehensive Plan. The Developer is seeking to build an industrial employment facility that features data centers and electrical power generation facilities (including a gas power plant and solar farm). To support the proposed uses, it is anticipated that the development will require a Major Comprehensive Plan Amendment to Employment as well as a Rezone to Industrial (I-3).

2.2 Sub-Basin Description

Most of the project property is on the south side of Green Wash; however, the northwest portion of the site is mostly in the floodplain of the wash with some proposed development outside the floodplain along the north bank of the wash. Existing off-site flows entering the southwest corner of the site cross the property from south to north. Further downstream along Green Wash off-site flows entering the site generally flow along Green Wash from southeast to northwest eventually turning to intersect with the wash near the northwest corner of the property. Off-site flows will be routed through the property and/or around the various developed areas within the property and will outlet at the original outflow locations.

Soils withing the project boundaries are mostly in Hydrologic Soil Group C. Some B and D soils are present in the south-central portion of the property with a mix of A, B, C, and D soils present in the southeastern part of the property. See the attached soils map in Appendix C.

3.0 DRAINAGE DESIGN CRITERIA

3.1 Regulations:

This project is expected to comply with Pinal County Drainage Ordinances, the Pinal County Drainage Manual (Volumes 1 & 2), and its amendments. Currently no development is planned within the boundaries of the delineated FEMA flood zone shown on the attached drainage exhibit; however, a portion of the project is within a Zone A Floodplain. Any improvements within the floodplain will determine the requirement of a Floodplain Use Permit or

CLOMR/LOMR. Any part of the development within the flood zone would be subject to floodplain requirements including Regulator Food Elevations (RFE) and earthwork restrictions.

3.2 Development Criteria and Constraints

Currently no previous drainage studies have been completed for the property, and the project is not part of a larger master plan for the area. Since the project area is subject to offsite flows a hydrologic/hydraulic study will need to be completed to characterize the properties of the offsite flows entering the site. A preliminary analysis of off-site flows estimated using HEC-HMS, USGS regression equations, and HEC-RAS has been completed for the purposes of this report. Preliminary Base Flood Elevation (BFE) contours have been estimated for existing offsite flows through the project area. These BFE contours will be used to establish the finish floor elevation of structures within the development. All flood estimates (water surface elevation, velocity, depth, etc.) will be refined as the project design progresses. The estimated finished floor elevations follow the requirements of Arizona State Standard SSA 4-95 "Identification of and Development Within Sheet Flow Areas" and will be a minimum of one foot above the 100-year RFE. Preliminary estimates of the ranges of finished floor elevations for the structures associated with the development can be found on the attached drainage exhibit in Appendix A.

Road improvements for the proposed development include paved, all-weather, 28-foot-wide public access to and from the development. A minimum of two permanent access points will be provided for the ingress and egress from the development to existing public roads. All access improvements approval by the County Engineer will be a condition of approval of the plat by the board.

All right-of-way dedication will be free and unencumbered. All roadway sections, alignments, access locations, and access movements shown in the rezoning application will need to be approved by the Pinal County Engineer. Drainage, irrigation canals, and ditches in project-dedicated ROW will be moved underground as part of dedication. Any potential offsite improvements required to be completed by the project will follow the TIA or Drainage Report and be accompanied by an offsite improvement plan for submittal.

This project will need to bring in utilities (such as water, sewer, power, fiber, etc.) needed to service the development. All support infrastructure including the proposed road access for the project will be designed to adhere to the standards of the Pinal County standards.

3.3 Hydrologic Criteria and Results

The site will be designed for the 100-year 2-hour rainfall event with a rainfall depth (P) of 2.36 inches as determined from NOAA Atlas 14 (See Appendix D). The equations and calculations for the peak flow, inlet capacities, street capacities, pipe network hydraulics, required retention volumes, and retention drainage requirements can be found in Appendix B. All drainage network will be designed and constructed to meet Pinal County requirements.

This development will need to demonstrate compliance with site retention, grading, drainage, earthwork, and elevations during preliminary and construction document submittals(s). Areas shown as being developed in the attached Drainage Exhibit will be considered to be under a Land Use Category of "Pavement and Rooftops" for the purposes of this preliminary drainage report to provide a conservative estimate of runoff and retention storage needs. The existing conditions will utilize the Land Use Category of "Hillslopes, Sonoran Desert" for the areas south of Green Wash, areas north or the wash will utilize the "Undeveloped Desert Rangeland" category. Once the site layout has progressed further a more detailed analysis will be completed. The 2-, 10-, 50-, and 100-year runoff recurrence intervals will be used for this analysis. The maximum value for the runoff coefficient (C) provided for each land use in the Pinal County Drainage Manual will be used for these preliminary runoff estimates.

Three large-scale drainage areas have been delineated for the site at this preliminary design stage. These large-scale drainage areas will be further refined and subdivided as the design progresses. A summary of the rational coefficients and resulting runoff retention volumes can be found below in Table 1.

Table 1: Estimated Proposed Retention Volumes

V = C * A * P / 12 [1]
Where:
V = Runoff Volume
C = Runoff Coefficient
A = Drainage Area
P = 2.36 in

Retention Volume Required and Summary

Development Stage and Return Interval	*Sub-Basin ID*	*Sub Basin Area Description*	*Contributing Area (ft^2)*	*C =*	*Volume Required, V_R (ac-ft)*
Proposed 100 year	Drainage Area 1	Pavement and Rooftops	10,455,723	0.95	44.85
	Drainage Area 2	Pavement and Rooftops	31,076,218	0.95	133.29
	Drainage Area 3	Pavement and Rooftops	54,637,390	0.95	234.35
		Total	96,169,331	0.95	412.48

3.4 Hydraulic Criteria

Report submittals for construction permitting will need to be calculated for the hydraulic design of streets, catch basins, pipes, etc. Peak flow estimates will be calculated using the rational method and the Papadakis and Kazan equation for determining Time of Concentration (Tc). Street capacity and pipe hydraulics will be calculated using Manning's equation. Peak flow estimates will be used for sizing inlets, verifying street capacities where applicable, and proposed pipe network hydraulics calculations. All associated calculations and design will follow the Pinal County Drainage Manual.

3.5 Variances from the Pinal County Drainage Manual

Currently no variances are anticipated from the drainage manual; however, should any future design requirements require variances, those variances will need to be addressed in their final drainage report.

4.0 DRAINAGE FACILITY DESIGN

4.1 General Concept

Existing drainage patterns are discussed above in Section 2.2. All off-site runoff will be routed such that it exits the property at the same predevelopment outflow location. No off-site runoff will be routed through any proposed retention basins.

On-site runoff will be routed via streets, open channels, catch basins, and/or pipe networks, to retention basins placed throughout the project area in locations best suited to service the development layout once the design has progressed to a more detailed level. Detention ponds are not anticipated for this project, and all retained storm water will be bled off via drywells.

Storm water runoff quality is not expected to be affected by the project since all runoff will be retained on site. Any areas where runoff is to be conveyed in an open channel or over land will be appropriately designed to prevent erosion and sedimentation. During construction a comprehensive Storm Water Pollution and Prevention Plan (SWPPP) will be developed and implemented.

4.2 Specific Details

Due to the scale of this project, the routing of off-site flows through the various project areas will need special attention. The location of proposed structures and infrastructure will likely need to be adjusted as the project design progresses to allow for the efficient passage of off-site storm water though the site. This routing is expected to be accomplished through a combination of underground and open channel conveyance methods.

The stormwater drainage network and retention facilities will be designed in accordance with the Pinal County Drainage Manual requirements. Any retention and/or drainage network facilities that cross parcel boundaries will require drainage easements, and these easements will be established as needed as the design progresses. Maintenance of on-site storm water facilities will be the responsibility of the parcel owner, or a business owner association and access for maintenance will be provided in the design of the various components of the drainage system.

5.0 CONCLUSIONS

5.1 Compliance with Standards

This project will adhere to the requirements of the Pinal County Drainage Manual. Variances to the manual requirements are not expected at this time; however, as the design progresses

any variances required by unforeseen design constraints will be detailed in the final drainage report.

5.2 Drainage Plan

The proposed project will increase runoff volumes and velocities in the proposed developed areas. Retention and runoff conveyance design will be completed in a manner that the constructed project will not adversely affect existing drainage conditions. The project will be designed to convey and retain the 100-year, 2-hour event on site, while passing the off-site flows through the project area and back to their original predevelopment outflow location(s).

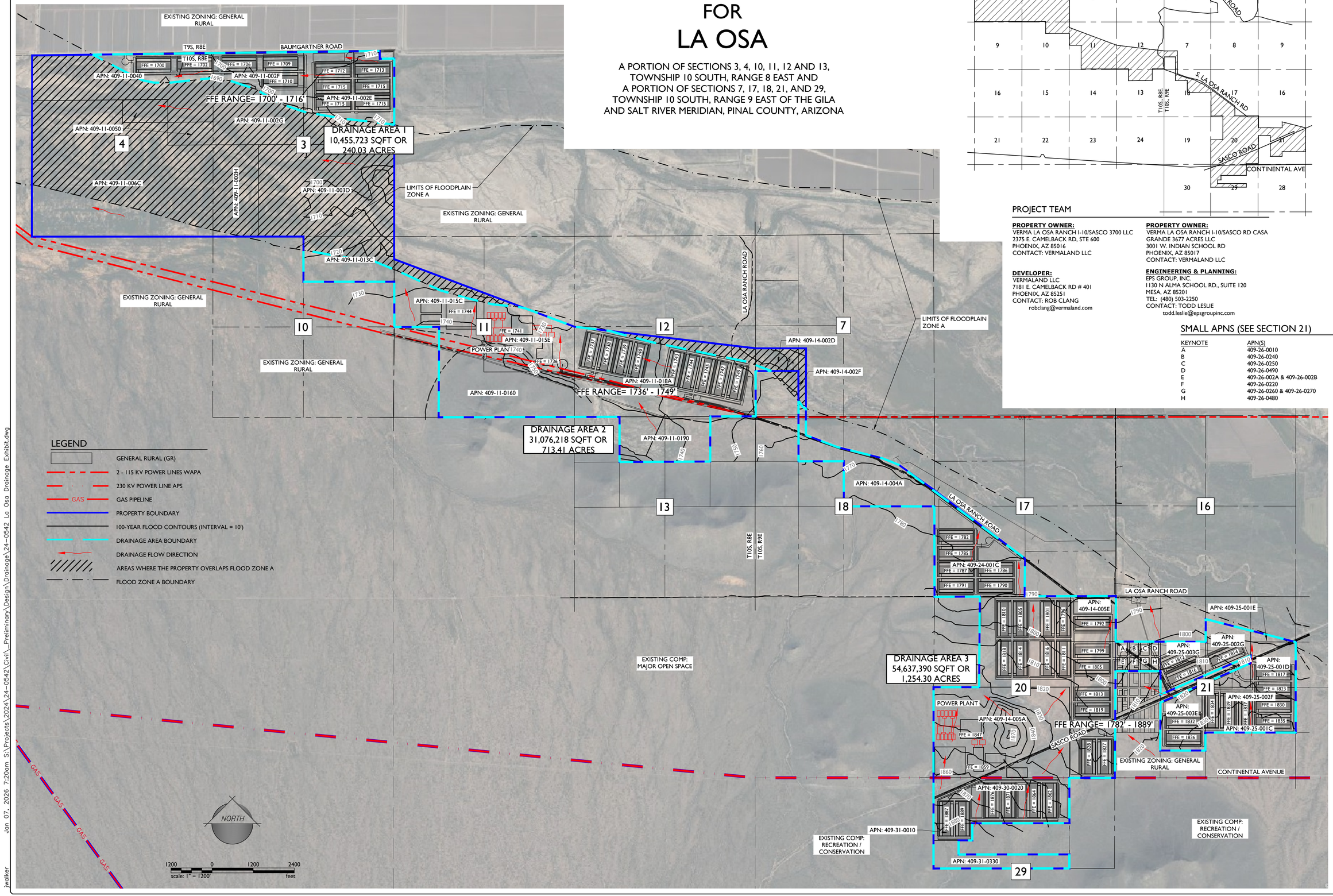
6.0 REFERENCES

1. "Pinal County Drainage Manual," Volumes 1 and 2, Pinal County, Arizona, August 2004.
2. "State Standard for Identification of and Development Within Sheet Flow Areas," Arizona State Standard 4-95, State of Arizona department of Water Resources Engineering Division, January 1995.
3. FEMA Map Service Center, National Flood Hazard FIRM. FEMA.gov. (n.d.). https://www.fema.gov/

Appendix A:
Drainage Exhibit

DRAINAGE EXHIBIT
FOR
LA OSA

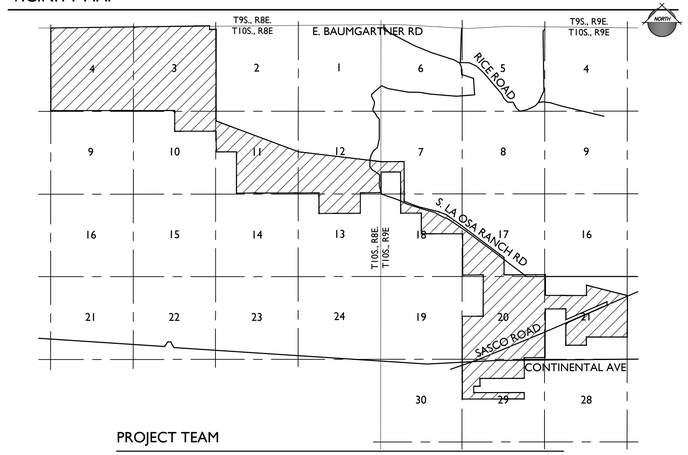
A PORTION OF SECTIONS 3, 4, 10, 11, 12 AND 13,
TOWNSHIP 10 SOUTH, RANGE 8 EAST AND
A PORTION OF SECTIONS 7, 17, 18, 21, AND 29,
TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA
AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA



LEGEND

- GENERAL RURAL (GR)
- 2 - 115 KV POWER LINES WAPA
- 230 KV POWER LINE APS
- GAS PIPELINE
- PROPERTY BOUNDARY
- 100-YEAR FLOOD CONTOURS (INTERVAL = 10')
- DRAINAGE AREA BOUNDARY
- DRAINAGE FLOW DIRECTION
- AREAS WHERE THE PROPERTY OVERLAPS FLOOD ZONE A
- FLOOD ZONE A BOUNDARY

VICINITY MAP



PROJECT TEAM

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CONTACT: VERMALAND LLC

DEVELOPER:
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PHOENIX, AZ 85251
CONTACT: ROB CLANG
robclang@vermaland.com

PROPERTY OWNER:
VERMA LA OSA RANCH I-10/SASCO RD CASA GRANDE 3677 ACRES LLC
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MESA, AZ 85201
TEL: (480) 503-2250
CONTACT: TODD LESLIE
todd.leslie@epsgroupinc.com

SMALL APNS (SEE SECTION 21)

KEYNOTE	APN(S)
A	409-26-0010
B	409-26-0240
C	409-26-0250
D	409-26-0490
E	409-26-002A & 409-26-002B
F	409-26-0220
G	409-26-0260 & 409-26-0270
H	409-26-0480

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DRAINAGE EXHIBIT

Project:

Revisions:

MAY XXX, 2025 - 1ST SUBMITTAL

Call at least two full working days before you begin excavation.
ARIZONA811
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

Designer: EPS
Drawn by: EPS

Preliminary
Not For
Construction
Or
Recording

Job No.
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jwalker